Public mental health: the time is ripe for translation of evidence into practice

KRISTIAN WAHLBECK

Finnish Association for Mental Health, Helsinki, Finland

Public mental health deals with mental health promotion, prevention of mental disorders and suicide, reducing mental health inequalities, and governance and organization of mental health service provision. The full impact of mental health is largely unrecognized within the public health sphere, despite the increasing burden of disease attributable to mental and behavioral disorders. Modern public mental health policies aim at improving psychosocial health by addressing determinants of mental health in all public policy areas. Stigmatization of mental disorders is a widespread phenomenon that constitutes a barrier for help-seeking and for the development of health care services, and is thus a core issue in public mental health actions. Lately, there has been heightened interest in the promotion of positive mental health and well-being. Effective programmes have been developed for promoting mental health in everyday settings such as families, schools and workplaces. New evidence indicates that many mental disorders and suicides are preventable by public mental health interventions. Available evidence favours the population approach over high-risk approaches. Public mental health emphasizes the role of primary care in the provision of mental health services to the population. The convincing evidence base for population-based mental health interventions asks for actions for putting evidence into practice.

Key words: Public mental health, mental health, mental health promotion, prevention of mental disorders, mental health services, mental health policy, wellbeing, stigma, human rights

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The field of public mental health approaches mental health issues at the population level. The need for a public health approach to reduce the burden of mental health problems is increasingly accepted, and this paper aims to summarize current thinking and trends in the field.

According to the World Health Organization (WHO), mental health is not just the absence of illness, but is rather conceptualized as a state of wellbeing in which the individual realizes his/her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his/her community (1). Consequently, public mental health is not just about the occurrence and prevention of mental disorders in the population, but also includes the promotion of mental health and wellbeing (2). Public mental health thus encompasses the experience, occurrence, distribution and trajectories of positive mental health and mental health problems and their determinants; mental health promotion and prevention of mental disorders; as well as mental health system policies, governance and organization.

In spite of their impact, mental health issues have been largely neglected in public health agendas. In order to successfully introduce these issues in the political agenda, a new approach was developed, primarily in Europe, in the 1990s. In this approach, neither the high prevalence of mental disorders nor the need for more resources in psychiatry was used as an entry point. Instead, it was highlighted that mental health is an integral component of public health, and that it has a significant impact on individual countries and their human, social and economic capital. The aim was to raise mental health from its professional, organizational and even political isolation within psychiatry to the broader sphere of public health, and to shift the focus from the individual to the population level, so that mental health could be perceived as a matter of interest for every-

It is now recognized that the foundations of mental health are laid in early life, and even in the prenatal period (4). Poor nutrition, exposure to toxic substances (such as alcohol) during pregnancy, trauma during labour, maternal depression, parental neglect, physical

and sexual abuse, and other forms of trauma and lack of stimulation impact a child's cognitive development and socio-emotional wellbeing (5). Later in life, social relationships are critical for promoting wellbeing and buffering against mental ill-health (6,7).

Individual, familial and societal determinants of mental health often lie in non-health policy domains such as social policy, education and urban planning. Consequently, the "Health in All Policies" approach (8) was developed, targeting determinants of mental health across policy areas in the whole population, reaching out to areas other than the health sector, and highlighting the links of mental health to productivity (9). This approach forms the basis of many modern mental health policy documents.

Major individual socio-economic risk factors for mental health problems and suicide are poverty, poor education, unemployment, high debt, social isolation and major life events (10-12). Actions to promote mental health within disadvantaged groups and hence reduce mental health inequalities are important constituents of public mental health actions (13).

MENTAL HEALTH PROMOTION

Mental health promotion aims to improve the mental health of a population by strengthening wellbeing. Researchers and experts in the field tend to agree that the concept of wellbeing comprises two main elements: feeling good (hedonic wellbeing) and functioning well (eudaimonic wellbeing). Happiness and enjoyment are aspects of hedonic wellbeing. Resilience (the capacity to cope with adversity), sense of mastery of one's life, and sense of coherence and optimism are characteristics of eudaimonic wellbeing (14). Standardized measures of wellbeing have been used in population-based surveys (15,16), and there are several countries in Northwestern Europe (e.g., England, Iceland and Scotland) that perform repeated measures of mental wellbeing in the population.

Common principles and recommendations for modern mental health promotion were laid by the Melbourne Charter in 2008 (17). The charter provides a framework which recognizes the influence of social and economic determinants on mental health and mental illness, and identifies the contribution that diverse sectors (including but not exclusive to health) make in influencing the conditions that create or ameliorate positive mental health. The charter stresses that mental health promotion is everybody's concern and responsibility; that mental wellbeing is best achieved in equitable, just and non-violent societies; and that mental health is best promoted through respectful, participatory means where culture and cultural heritage and diversity are acknowledged and valued (17). Effective mental health promotion builds on cross-sectoral collaboration with non-health sectors, including education, housing, employment and industry, transport, arts, sports, urban planning and justice.

An important target for mental health promotion intervention is parenting, including early parent-child interaction and approaches to discipline in child upbringing. Promoting a nurturing early interaction between caregivers and the child increases the resilience of children in the face of adverse life

events and promotes life-long mental health and wellbeing. Home visitation programmes that provide counselling, as well as a specific intervention to strengthen parent-child interaction, have been shown to be effective when delivered by trained lay women in developing countries (18), and by trained nurses in developed settings (19). Such programmes have been found to improve maternal sensitivity, to reduce criticism and harsh upbringing and to improve attachment of children. Parenting programmes also prevent mental disorders: e.g., the primarily behavioral Webster-Stratton programme, also known as the Incredible Years Programme, has been successful in reducing the occurrence of conduct disorders (20).

The past two decades have seen a significant growth of research and good practice on mental health promotion in schools (21). Activities operate under a variety of headings, not only "mental health", but also "social and emotional learning", "emotional literacy", "emotional intelligence", "resilience", "life skills" and "character education". Interventions focus on skills and the curriculum, teacher education, peer support or a whole school approach including work on school ethos. Positive impacts include the reduction of depression, aggression, impulsiveness and antisocial behavior, as well as the development of proficiencies that promote mental health such as cooperation, resilience, a sense of optimism, increased problem solving skills, empathy and a positive and realistic self-concept. School programmes have consistently been shown to have positive moderate to strong effects on specific social and emotional skills and competences (22). Small to moderate effects of interventions have been also reported on positive mental, emotional and social health and wellbeing in general (23). Programmes have also shown to help prevent and reduce early sexual experience, alcohol and drug use, violence and bullying in and outside schools, to promote pro-social behavior and, in some cases, to reduce juvenile crime. Furthermore, mental health

promotion programmes in schools significantly improve academic performance. Data indicate that successful school programmes include those with sequential and integrated skills curriculum, active forms of learning to promote skills, focus on skill development and explicit learning goals (24).

In the adult population, the workplace is an important setting for mental health promotion. Actions can be implemented at an organizational level or targeted at specific individuals. The former can target managers and include measures to promote awareness of mental health and wellbeing in the workplace and improve their skills in risk-management of stress and poor mental health. This can be achieved by examining job content, working conditions, terms of employment, social relations at work, modifications to the physical working environment, flexible working hours, improved employeremployee communication and opportunities for career progression. Actions targeted at individual workers can include modifying workloads, providing cognitive behavior therapy, time management training, exercise programmes, journaling, biofeedback and goal-setting. The most researched interventions are based on individual skills training implemented by means of cognitive, communication and daily life skills development, relaxation, meditation and mindfulness training, job stress management, and problem solving. Currently, the highest efficacy ratios have been attained in studies aiming to reduce stress and absenteeism levels, while intervention efficacy is reportedly lower regarding job satisfaction improvement and mental health enhancement. Stress reduction (coping improvement) interventions seem to be better known and easier to implement than those aimed at increasing employees' job satisfaction. Structuring employment to create "good work" brings health benefits to the individual, financial benefits to the corporation and both direct and indirect improvements to the fabric of society (25).

For older people, the most promising interventions promoting mental health include meaningful social activities, tailored to the older individual's abilities and preferences. Studies have shown that associations exist between social capital in the ageing population and mental health (26,27). Crucial components of the individual-level social capital concept, such as social support and social network size, are negatively associated with depressive symptoms and depression. Research has highlighted that civic mistrust and lack of reciprocity or social participation (i.e., low individual-level social capital) are associated with depressive symptoms among older adults. Psychosocial interventions aiming to increase the social contacts of older participants tend to improve mental wellbeing and reduce feelings of loneliness. A metaanalysis has shown that social activities among older people significantly improve positive mental health, life satisfaction and quality of life and reduce depressive symptoms when compared to no-intervention (28).

PREVENTION OF MENTAL DISORDERS

Prevention of mental disorders has a long history. The early ideas of the mental hygiene movement, at the beginning of the 20th century, were first translated into experimental activities in primary health care, schools and public health practices. However, the systematic development of sciencebased prevention programmes and controlled studies to test the effectiveness of preventive interventions in the mental health field did not emerge until around 1980. Since then, the multidisciplinary field of prevention science in mental health has developed at a rapid pace, generating evidence showing that preventive interventions can influence risk and protective factors, and reduce the incidence and prevalence of some mental disorders.

Primary prevention addresses wider determinants across whole populations, and is of special interest to public mental health. Depending on the target group, primary prevention can be universal, selective or indicated. Selective prevention focuses on groups at higher risk of developing a disorder. Indicated prevention targets individuals who are identified as having minimal but detectable signs or symptoms foreshadowing a mental disorder, or biological markers indicating predisposition for mental disorder, but who do not meet all diagnostic criteria for a disorder at that time. An example of highly effective selective prevention is given by interventions to support parenting and children in families with mental disorders. A recent systematic review and meta-analysis indicated that the risk of mental disorders in the offspring can be reduced by 40% by preventive interventions (29).

In public mental health, the main arenas of preventive work are outside the health setting, e.g., in schools and workplaces. Bullying among youth is a significant public health problem; it is prevalent and frequently has a detrimental mental health impact reaching into adult life (30,31). A meta-analysis of strategies to prevent school bullying concluded that whole school approaches, including multiple disciplines and complementary components directed at different levels of school organization, more often reduced victimization and bullying compared to interventions that only included classroom-level curricula or social skills groups (32). Prevention of bullying would improve mental health outcomes for many young people, and advocating effective anti-bullying prevention programmes is an important part of public mental health activities.

Public mental health activities also aim at strengthening communities. Community systems-strengthening interventions focus on developing empowering processes and building a sense of ownership and social responsibility within community members. An example of such an intervention is the Communities That Care (CTC) Programme, which has been implemented successfully in the U.S. and is currently being adopted and replicated in several developed countries. The CTC intervention activates communities

to implement community violence and aggression prevention systems (33). Evaluations at various CTC sites have indicated improvements in youth outcomes such as reduction in school problems, weapons charges, burglary, drug offences and assault charges.

There is rich evidence showing that conduct disorders, aggression and violence of young people can be prevented. The most successful preventive interventions focus on improving the social competence and pro-social behavior of children, parents, peers and teachers. Universal interventions which have had a successful impact on conduct problems are all school-based and include classroom behavior management, enhancing child social skills and multimodal strategies involving parents. Moreover, school- or community-based programmes for selected child populations at risk have successfully targeted child social and problem-solving skills and/or parent management skills, resulting in a decrease in negative parentchild interactions and teacher ratings of conduct problems at school (34).

Recent research demonstrates that depressive episodes can be prevented in a cost-effective and even cost-saving way (35). Preventive interventions can reduce the incidence of new episodes of major depressive disorder by about 25%. Adding a stepped-care model to the preventive intervention may reduce the number of new episodes even more (36). Methods with proven effectiveness include educational, psychotherapeutic, pharmacological, lifestyle and nutritional interventions. School-based programmes targeting cognitive, problemsolving and social skills of children and adolescents have achieved a reduction in depressive symptom levels of 50% or more a year after the intervention (37). Also anxiety disorders can successfully be prevented by strengthening emotional resilience, self-confidence and cognitive problem-solving skills in schools (38).

Substance abuse disorders can be prevented by universal policy actions aimed to reduce the availability of alcohol and drugs. Effective regulatory interventions include taxation, restrictions

on availability and total bans on all forms of direct and indirect advertising. When applied to alcohol, education and persuasion strategies usually concern decreased alcohol consumption, the hazards of driving under the influence of alcohol and related topics. Despite their good intentions, public service announcements are considered an ineffective antidote to the high-quality prodrinking messages that appear much more frequently through paid advertisements in the mass media (39).

Universal and selective interventions are not yet viable strategies in the prevention of psychoses. The indicated prevention approach and early identification and intervention hold some promise to reduce the burden of schizophrenia and other psychoses. Typically, there is delay of 1-2 years between the onset of schizophrenia and initiation of treatment, due to failure in identifying psychosis. A prolonged duration of untreated psychosis has been linked to poorer outcomes. Several populationbased indicated preventive programs have been developed to reduce the duration of untreated psychosis. Improving community awareness and increased mental health literacy of the general population reduced the delay into treatment in the Norwegian Treatment and Identification of Psychosis Study (TIPS) and subsequent studies in Australia (40).

PREVENTION OF SUICIDES

Suicides can be prevented by public health actions, and suicide prevention has consistently been shown to be highly cost-effective. Public health approaches to suicide prevention have to integrate societal and cultural viewpoints with medical and psychological ones to develop strategies that will save lives in an effective and measurable way.

Considerable evidence is available for the effectiveness of broadly applied population-level interventions. The restriction of access to common and highly lethal suicide means, such as toxic substances and firearms, has been successful in reducing suicides (41). Restriction of one suicide mean seems not to lead to a switch to another, as suicidal persons tend to have a preference for a specific method (42). Responsible media coverage of suicides, based on media guidelines and monitoring of stigmatizing media reports, have been linked to reduced stigmatization in press and reduction of suicides (43,44).

Community-based multi-level interventions targeting primary care providers, gate keepers, general populations and patients with their relatives have been linked to reductions in suicide (45,46). The evidence for targeted interventions, which address high-risk groups such as people who self-harm, people bereaved by suicide, and people with severe mental illness, is less convincing but promising (47).

Although suicide rates are higher in some risk groups than in the general population, universal approaches hold the potential to prevent a greater number of deaths (48). For example, in times of peace, when most firearmrelated deaths are suicides, enforcement of gun-control policies (e.g., purchase restrictions, waiting times for gun purchase, higher age limits, licensing of firearm owners, safe storage precautions) can reduce numbers of firearm suicides (49). Empirical data suggest that firearm regulations, which function to reduce overall gun availability, have a significant deterrent effect on male suicide, while regulations that seek to prohibit high-risk individuals from owning firearms have a lesser effect (50).

MENTAL HEALTH SERVICES

Design, management and evaluation of mental health services and systems are important tasks of public mental health. Today, mental health service provision is in a global transition from hospital-based to community-based systems (51). The change reflects the growing evidence of what constitutes costeffective care, but also acknowledges the failures regarding social inclusion

and human rights of the old institutionbased care system (52). Available evidence indicates that community-based and diversified mental health systems, with a wide range of services, are superior to hospital-centred mental health systems, according to a range of outcomes. For instance, community-based, welldeveloped and multifaceted mental health services have been linked to lower suicide rates than hospital-based traditional services (53). Discharged patients benefit from well-developed community care; community follow-up has been associated with a significant reduction in suicides among recently discharged psychiatric patients (54).

The recent history of mental health services can be seen in terms of three periods: first, the rise of the asylum; second, the decline of the asylum; and third, balancing mental health services (51). In the first era, the medical model prevailed. Later, it has been supplemented by an emphasis on autonomy and human rights of service users. During the last ten years, the recovery approach, stressing the first person view and personal journey of the service user, has greatly contributed to the public mental health view on how a modern mental health care system should be constructed. In a recoveryoriented system of balanced care, the focus is on services that are provided in normal community settings, as close to the population served as possible, and based on individual needs. Development and evaluation of recovery orientation and person-centeredness in mental health care are current challenges in public mental health (55,56).

A core element of modern mental health care is the empowerment of service users and informal carers. Historically, people with mental health problems have lacked a voice. Empowerment translates into being treated with dignity and respect in mental health services and participation of users and carers in decisions. Key issues that users and carers have expressed as important to advocate for are: rights to autonomy and self-determination, to acceptable and accessible services, to user-led evaluation of services; the

right for everyone to be recognized as a person before the law without discrimination, the de-stigmatization of mental disorders, and more inclusive and respectful services with user and carer involvement. Increased use of peer support and "experts by experience" in the provision of mental health services will support empowerment of service users and improve services (57).

A public health policy supporting the integration of health and social services, and the mainstreaming of mental health services into primary care, improves access to care on the whole. Integrating mental health services into general health care is often the most viable way of closing the treatment gap and ensuring that people get the care they need. Primary care responsibility for common mental disorders should be supported by accessible referral systems and specialist supervision (58). Providing even minimal psychotherapy in primary care can prevent full-blown depression (59). Programmes aimed at education of primary care physicians have improved the detection of depression and even led to a decrease in suicides due to depression (60). The use of new media, such as e-mental health and smart phone technologies, and the use of lay health counsellors, may boost dissemination of mental health interventions, especially in low- and middle-income countries.

Public mental health does not only deal with the organization of mental health services; it also strives to comprehensively cover all aspects of service user needs, including supported housing and vocational support. Collated evidence suggests that supported employment schemes, which consist of arranging early placement in normal work with variable support from staff. may offer better outcomes than sheltered or transitional employment approaches. People suffering from mental disorders wishing to work should be offered the option of supported employment as part of their treatment package. Evidence indicates that supported work improves clinical outcomes and fosters social inclusion of people with severe mental disorders (61).

International benchmarking, based on comparable data, is an important moving force for the development of mental health services in countries. Unfortunately, mental health information systems, in most countries, are geared towards hospital data, which are of less interest when developing a community-based mental health service provision system. Many highly relevant aspects of modern service provision, such as patient choice, service user empowerment and respect for human rights, are hardly ever covered by health information systems (62).

FIGHTING STIGMA AND DEFENDING HUMAN RIGHTS

Stigmatization of people with mental disorders is a core concept in understanding the field of public mental health (63). Stigma has an in-depth influence on the status of mental health services, their resource allocation and their attractiveness to the workforce. It represents a barrier to help-seeking behavior among people with mental health problems, and affects provision of services negatively (64).

Stigma and stereotypes form negative public attitudes towards people with mental health problems and psychiatry as a whole (63). Discrimination of people with mental disorders is a common manifestation of stigma. International studies have shown that discrimination of people with mental disorders is consistently common across cultures (65,66). Overall, there is a lack of parity between mental and physical disorders, in that people with mental disorders as well as the services they are provided are less valued.

Consequently, actions against stigma are core activities in public mental health. Unfortunately, not even large-scale and expensive anti-stigma campaigns have shown much promise in achieving changes in public attitudes (67,68). A combination of positive social contact with people with mental disorders, protest against stigmatizing messages and measures, and educa-

tion seems to be most effective in fighting stigma (69,70). Social contact has shown to be the most promising evidence-based intervention method, including "proxy" contact, for example a narrative through a film (71). Public protests have played a limited role in mental health campaigns compared to other civil rights movements, perhaps due to the very deeply held prejudice within society and the potential for ridicule (72). At best, anti-stigma activities such as providing social contacts are mainstreamed in school curricula and training of professionals.

Mental disorders are inextricably linked to human rights issues. The stigma, discrimination and human rights violations that individuals and families affected by mental disorders suffer are intense and pervasive. The United Nations Convention on the Rights of Persons with Disabilities (73), adopted in 2006, affirms that people with mental health disabilities have the right to full participation and inclusion in society, including the right to live independently, the right to education, and the right to work. The convention, and related pressure from the international community, will increasingly put human and fundamental rights issues at the forefront of new regional and national mental health policies across the globe. In countries with well-developed legislation, there is an increasing movement away from potentially discriminatory separate mental health legislation to fusion laws covering all kinds of impairments and health needs (74).

CONCLUSIONS

Public mental health is coming of age and is increasingly being accepted as an important and integral part of both public health and mental health. However, in many countries there are major shortcomings in training opportunities and research activities. A recent European mapping indicates that public mental health research is concentrated in the most affluent countries, in

spite of major needs in less affluent countries (75).

A recent expert consensus statement on research needs in public mental health (76) stressed that positive mental health and protective factors should be prioritized when planning future research actions and strategies. Furthermore, the need for using interdisciplinary perspectives in order to better understand the complexity of mental health has emerged, as well as the fact that the theory base of public mental health research, including conceptual definitions and frameworks, should be strengthened across all research initiatives in the field.

Many challenges remain in the field of public mental health research, both in the identification of risk, protective and resilience factors for mental health across the lifespan and in the development and implementation of effective and evidence-based public mental health interventions. Taken together, however, the evidence base for public mental health interventions is convincing, and the time is now ripe to move from knowledge to action.

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